WO 2005/078863 PCT/IB2005/000074

4

## **CLAIMS**

- 1. An antenna, characterized therein that it is spheroidal.
- 2. The antenna as claimed in Claim 1, characterized therein that it has a winding that is spheroidally configured.
- 3. The antenna as claimed in Claim 2, characterized therein that the winding comprises a three-dimensional spiral about an axis, the radius of turns of the winding progressively increasing and then decreasing.
- 4. The antenna as claimed in Claim 2, characterized therein that the winding is of a multi-solenoid conductor.
- 5. The antenna as claimed in Claim 2, characterized therein that the winding is composite, comprising a primary conductor with a secondary conductor wound toroidally about the primary conductor.
- 6. The antenna as claimed in Claim 5, characterized therein that the primary conductor is a multi-solenoid conductor.
- 7. The antenna as claimed in Claim 5, characterized therein that the secondary conductor is a multi-solenoid conductor.
- 8. The antenna as claimed in Claim 2, characterized therein that it has a plurality of windings, each winding having a start and an end.
- 9. The antenna as claimed in Claim 8, characterized therein that turns of a first winding are laterally adjacent the turns of a second winding.

WO 2005/078863 PCT/IB2005/000074

5

- 10. The antenna as claimed in Claim 8, characterized therein that it has a plurality of layers.
- 11. The antenna as claimed in Claim 10, characterized therein that the turns of a winding in a first layer are at an angle to turns of a super-adjacent second layer.
- 12. The antenna as claimed in any one of Claims 2 to 11, characterized therein that is has a spheroidal former on which the or each winding is wound.
- 13. The antenna as claimed in Claim 12, characterized therein that the former is hollow.
- 14. An antenna substantially as described herein with reference to the accompanying drawings.